

Paterson Great Falls

National Historical Park
New Jersey
National Park Service
U.S. Department of the Interior



Hi! We are members of the Great Falls Youth Corps and we want to congratulate you on earning your official Jr. Ranger Badge. Thank you for helping us, the Park Rangers, the City of Paterson, the Municipal Utilities Authority, museum officials and volunteers take care of Paterson Great Falls National Historical Park. Since this special place is part of our neighborhood, we are glad that you came to learn more about it. We bet there are special places in your neighborhood that you can learn more about and take care of. We hope you find them and spread the word, just like we do here...in Paterson.

For Additional Information or to mail in your completed Jr. Ranger booklet:

Paterson Great Falls National Historical Park

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Find us at:

www.nps.gov/pagr

www.facebook.com/PatersonGreatFalls

Twitter: @GreatFallsNPS

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Paterson, NJ 2013

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Adali Rosario/Adali Photography

Name: _____



A Junior Ranger Book For All Ages

Welcome to One of Your National Parks



We are excited that you have decided to become a Junior Ranger at Paterson Great Falls National Historical Park (NHP), one of over 400 national park sites around the country and part of the National Park Service (NPS). The NPS is an agency of the United States (U.S.) Government which means that all national parks belong to you.



By becoming a Junior Ranger, you can help us protect these important places for the benefit and enjoyment of future generations. Here's how.....



To become a Junior Ranger, and receive your official Junior Ranger badge and certificate:

- 1) Read and complete the activities. We encourage you to discuss your thoughts with the people you brought with you today.
- 2) For ages 9 and up - complete all activities with the Ranger hat picture next to them.
- 3) If you are under age 9, complete all the activities with the Arrowhead next to them.
- 4) Show the completed activities to a ranger, museum official or volunteer and share what you learned.
- 5) Respect people, things, and nature as you safely explore the area.
- 6) Share three things that you learned with your friends or family members back home.

Junior Ranger Certificate

This is to certify that _____ **has completed**
the necessary requirements in the Paterson Great Falls National Historical
Park Jr. Ranger Booklet.

Junior Ranger Challenge:

As a Junior Ranger, I will protect the nature and history of Paterson Great Falls National Historical Park by sharing what I have learned with others. I will continue to explore, learn and protect, other places within the National Park Service and in my neighborhood.



Passport Stamp

(Junior Ranger Signature)

(Park Ranger / Museum or Volunteer Signature)

**Congratulations! You are now a Junior Ranger at
Paterson Great Falls National Historical Park.**

Continuing the Journey

If you enjoyed this booklet, you may want to become a Junior Ranger at another national park.

Many National Park sites offer Junior Ranger programs and some of these are available online.

For a list of some of the national park sites with Junior Ranger programs, including those online, visit:



<http://www.nps.gov/learn/juniorranger.htm>

Additional information about all the national park sites can be found at: www.nps.gov

Another Opportunity - Web Rangers

If you love your National Parks, Monuments, Historic Sites, etc. then the Web Ranger program may be for you. Play more than 50 games and learn about your National Parks. Online activities can be found at

www.nps.gov/webangers or www.webangers.us.

There are three different levels of activities that you can try at Web Rangers. Please get your family's permission before going on-line.



A Symbol for the NPS



A symbol is an object that looks like one thing but can mean something else. For example, the bald eagle is a symbol for the United States.



The picture to the left, is a symbol of the National Park Service and it is called the NPS Arrowhead. Look for this symbol on signs, brochures or on park ranger uniforms. The arrowhead, and the pictures found inside symbolize the work that the National Park Service does to take care of our special places.

By understanding the symbols of the arrowhead, you can figure out how you can help take care of your national parks.

In the space provided, write down what each of the symbols mean to you. The first one has been done for you as an example.

Symbol	Meaning
Mountain	Land formations, scenery, recreation, playing outside, hiking
Tree	
Grass	
Lake	
Bison	
Arrowhead	

Create Your Own Arrowhead

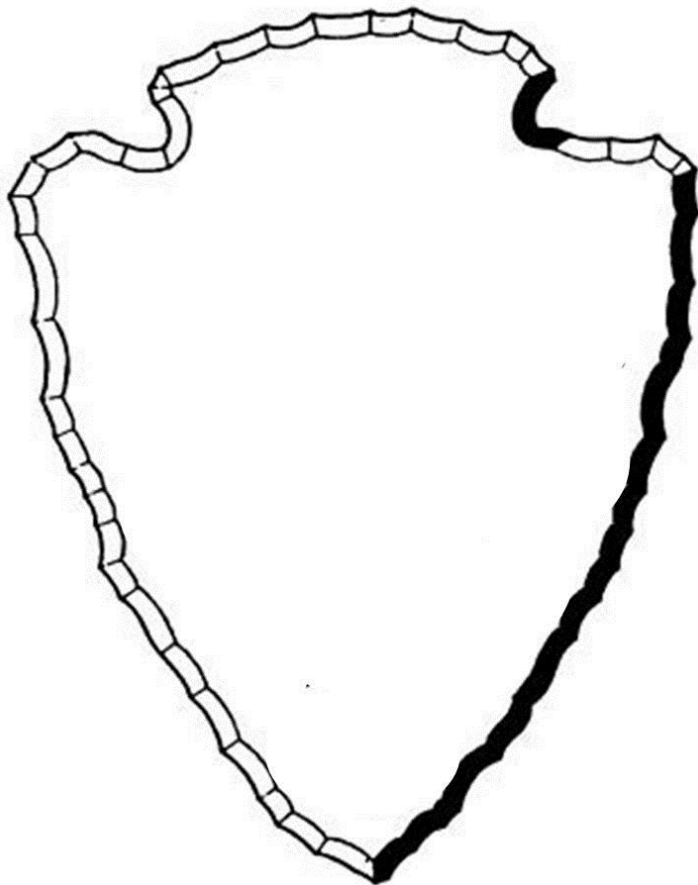


What are some natural, historic or cultural items or ideas that you would like to protect?

Make a list of three to five items and/or ideas.

Decide what kind of symbol you would like to represent each of the items on your list.

Draw these symbols inside the Arrowhead below and be ready to explain your symbols to someone else.



C A E S N A I L A T I S M M I W
A R S T N A R G I M M I I E A O
E P A N E L I N N E L L T N S O
N D Y E L P A N E L K K M I A M
L S R E G O R L W U G C A R P I
A R A Z A S N O I N U I N A A L
I A P A P E R O Z A N T U M T L
R W A I R K A M B U S Y F B E W
P Y S R E E P B O T T O A U R O
L R S R A Y H C N E R F C S A R
A A A S L M J N O N O T T O C M
N N I N L I S L L A F H U L E S
E O C E I L H T O T E E R O W U
E I R W E L A R L I Z W I C A M
N T I J D O M F S O G O N O Y I
G U V E T W I L T N C R G M E L
I L E R E N L A R A V L G O S S
N O R S X E T M I L E D U T C H
E V O E T R O B K P W R N I A U
S E S Y I S N E E A N U G V S T
S R E T A P A T E R S O N E H T
W G S R E V A E W K L I S S E L

Word Search “just for fun”

Locate the words below. They may be forward or backwards, horizontal, vertical, or diagonal.

Ages up to 8: Find at least 6 words

Ages 8-12: Find at least 10 words

Ages 13 and above: Find all the words

RACEWAY	AIRPLANE ENGINES
MILL	LENNI LENAPE
PAPER	PASSAIC RIVER
LOOM	MANUFACTURING
COTTON	NATIONAL PARK
DUTCH	LOCOMOTIVES
GUNS	GREAT FALLS
S.U.M.	SUBMARINE
STRIKE	MILL OWNERS
SILK	SILK CITY OF THE WORLD
UNIONS	IMMIGRANTS
PATERSON	MILL WORKER

BONUS: Write any additional words you found in the space below.

Scavenger Hunt Bingo



The pictures below are symbols of the nationally important natural and cultural stories of the Great Falls and the City of Paterson. Locate the items below as you walk around the park and Circle them below. Try to get three in a row or find them all!

<p>Find this sign</p> 	<p>Find this raceway, (hint: search the park across the street)</p> 	<p>Find this mill building</p> 
<p>Find this symbol</p> 	<p>Free Space</p>  <p>Ring the bell</p>	<p>Find this statue</p> 
<p>Find this rock</p> 	<p>Find this view</p> 	<p>Find this building</p> 

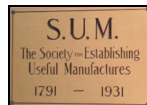
Alexander Hamilton



Alexander Hamilton had lofty dreams for the nation and helped shape the future of Paterson. Read the information about Hamilton and then answer the questions.



- ☐ An ambitious young man, with a talent for business, who believed in hard work and the importance of learning.
- ☐ Left college to fight in the Revolutionary War.
- ☐ Became a valuable aide to General George Washington.
- ☐ Picnicked in the area of the Great Falls in 1778 and was impressed by the power and energy produced by the falls and river.
- ☐ Inspired by the power of the Great Falls, Hamilton envisioned the use of waterpower for manufacturing and industry.
- ☐ He became the new nation's first Secretary of the Treasury (1789).
- ☐ Hamilton believed that the new nation must not be dependent on other nations. It must have a strong and secure economy that included manufacturing as well as farming.
- ☐ Helped to create a new investment corporation (1791), the Society for Establishing Useful Manufactures (S.U.M.).
- ☐ Hamilton's vision becomes a reality when the S.U.M. develops Paterson, the first planned industrial city in the United States, using waterpower from the Passaic River (1792).
- ☐ An early opponent of slavery and a strong supporter for immigration.



Faces of Paterson-Museum Activity (optional)



Match the face with its description on the right.

A



B



C



D



E



F



G



- _____ My name is Alexander Hamilton. I was instrumental in the founding of S.U.M. and the city of Paterson.
- _____ I worked as a bobbin boy when I was only 10 years old in England. Eventually, I owned 5 silk mills in Paterson and an elegant mansion on a hill. I am Catholina Lambert.
- _____ We work in the dyehouse. It can be a dangerous hot and humid job. Before coming to this country we worked outside in the fresh air.
- _____ I am an immigrant from Ireland. I came to Paterson in 1878 to launch my submarine, Holland I, in the Passaic River. I named it after myself, John Phillip Holland.
- _____ Women, like myself, played an active role in the 1913 Silk Strike. We walked the picket line as well as led mass meetings.
- _____ Children, like myself, work hard to help support our families. 10 hours a day, 6 days a week, we work inside. I would like to play outside and go to school.
- _____ Women were considered cheaper labor and usually received lower wages than men. We worked just as hard to support our families and then had our jobs at home.

Take A Walk: Continued



- 6) Continue following the path that runs along the raceway and then curves abruptly at a switchback back to the sidewalk along Spruce Street. Close your eyes and imagine.
 - ♦ What do you think you would you have seen and heard back in the early 1800s?

- 7) Continue walking down Spruce Street until you come to the intersection with Market Street. Use the crosswalk to cross Market Street and proceed down the sidewalk to the Paterson Museum - *The following activities are optional*

The Paterson Museum was organized in 1925. It was relocated in 1982 to the restored Thomas Rogers Locomotive and Machine Shop.

Put a check next to the exhibits that you saw:



“Silk City”--- a display of machinery and looms used in the city’s silk industry.



“Geology”--- a collection of minerals, including fluorescent ones, from New Jersey and around the world.



“The Paterson Colts” --- a selection of over thirty rare Paterson-made revolvers by Samuel Colt .



“John Holland’s Submarines” --- an exhibit that features the first self-powered submarines, the Holland I and II, and their history.



“Locomotive Manufacturing”--- a display of photos, models, and stories of the most famous locomotives manufactured in Paterson



“Wright Engines”--- a display of aircraft engines that made aviation history



“Land of Noisy Waters”--- artifacts of the Lenni-Lenape Native American culture

Other Exhibits: _____

The Paterson Museum 2 Market Street, Paterson, New Jersey

Museum Hours: *Closed on Mondays and Holidays.*

Tuesday thru Friday 10:00 AM to 4:00 PM

Saturday and Sunday 12:30 PM to 4:30 PM



Why do you think Alexander Hamilton felt such a great need for this new country to be economically independent?



What do you think is meant by this quote:
“In Paterson, Hamilton launched what we have come to call the American Dream.”



Do you have a vision for the United States?
If so, describe your vision.

Word Scramble: History of Paterson



Learn the history of the area by unscrambling the words and writing them in the space above the clues.

NINLE PEENAL

The area was once settled by these native people.

TCHUD

These immigrants colonized the Great Falls area in the 17th century.

CWRAYAES

To really harness the power of the Passaic River it was necessary to construct _____ to carry water to various waterwheels to provide power to the mills.

ORGEGE HTONAISNGW

A famous general and his troops had a picnic at the Great Falls in 1778 during the American Revolution.

4) Continue walking across the footbridge to Mary Ellen Kramer Park.

- ◆ Explore the area. Describe what you see.

- ◆ Locate the large rock near the flagpole. Design a plaque to mount on this rock that describes the importance of this area.

5) Walk back across the footbridge toward McBride Avenue. Continue to the intersection of McBride Avenue and Spruce Street and cross McBride Avenue. Be sure to use the crosswalk! Enter Upper Raceway Park.

The Upper Raceway is part of a system that diverted water, from the falls, into narrow canals. The rushing water carried power to the waterwheels which operated the mills.

- ◆ Walk along the path. Imagine the raceway filled with water and the buildings behind you operating with water-wheels. What do you think they are manufacturing?

Take A Walk



Experience Paterson Great Falls National Historic Park more closely by taking a walk. See some of the features that make this area so beautiful and historic. Follow the route below and complete the activity for each stop. Make sure you take an adult along with you.

- 1) Begin your walk at the Great Falls Overlook.

The Great Falls is about 300 feet wide and 77 feet high. It is the second most powerful waterfall east of the Mississippi River.

- ♦ Find the sign located near the statue and acquaint yourself with the area.
- 2) Walk to the stairs in the middle the parking lot, go down to the lower level to the S.U.M. Hydroelectric Plant.

This was one of the country's earliest hydro-electric plants. The plant uses energy from the falling river to produce electricity.

- ♦ Sit at one of the picnic tables and use your senses. Write down what you experience.
- 3) Walk back up the hill to the parking lot. Walk up McBride Avenue and veer to the right to enter the area that leads to the footbridge that crosses the Falls. Walk halfway on the bridge.

The waterfall pours up to two billion gallons of water into the basalt chasm daily, second in volume and width only to Niagara Falls.

- ♦ Look off of both sides of the bridge. Did you see a rainbow? What caused this rainbow to form?

EXALNERDA ILHONAMT

One of the Founding Fathers who helped develop a plan for a manufacturing society.

ETPSARON

The Society for Establishing Useful Manufactures (S.U.M) established this new town. This was its name.

EWN SERYEJ

The town was named after the governor of this state.

SAPCIAS

Engineer Pierre C. L'Enfant designed the first plans to harness the power from this river.

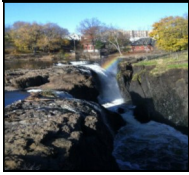
NTOOCT

This was the first product of the Great Falls Historic District's first mill, constructed by the S.U.M..

YRECINLCG

Mills at the Great Falls were used and reused by different manufacturers during the history of the area. Reuse continues today. This is a form of _____.

Be a Visual Artist or a Writer



"The river comes pouring in above the city and crashes from the edge of the gorge in a recoil of spray and rainbow mists."

William Carlos Williams in "Paterson" an Epic Poem

Throughout the years, the spectacular natural beauty of the Great Falls has inspired many artists to depict the landscape and the city that grew up around it in paintings, photographs and poems. In the space below, draw a picture of something that inspired you during your visit to Paterson Great Falls National Historical Park. In one sentence, written or oral, explain what inspired you to create this drawing.

Geology: The Paterson Area

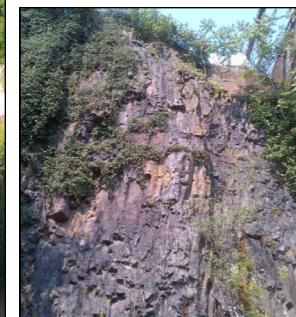


Geology is a science that studies the history of the earth and its life as recorded in rocks. The Paterson area has several geological features. Match the definitions with the pictures below by placing the number(s) of the pictures next to each description. There are several correct answers, and there can be multiple answers for each one, just make sure you are able to explain your answers to someone else.

- _____ **Basalt:** A dark colored rock that forms when lava cools and hardens. Found in the cliffs over which the Passaic River flows, the steep river banks, and in the river itself.
- _____ **Erosion:** wearing away of rocks by natural agents such as wind, water, ice, glaciers, etc. The pieces are moved to a new location by wind or water. Observe the result of erosion caused by the action of running and falling water at the Great Falls.
- _____ **Weathering:** The breaking down of rock into smaller pieces by the weather. The pieces that break off do not move to a new location and they remain next to the place that they broke from. Weathering can either be chemical (caused by acid rain or lichens for example) or mechanical (such as wind, water, ice). Sometimes the pieces are broken down so small, that they become dirt. Basalt is typically dark-gray to black in color but will often have a yellowish brown or even a gray to purple color as a result of weathering.
- _____ **Chasm:** a deep, steep-sided opening in the earth's surface. Possibly developed from a huge crack in the underlying rock and then then widened by erosion.



1



2



3